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November 20, 1997

Richard Woodard CALFED Bay-Delta Program Water Quality Technical Group 1416 Ninth Street; Suite 1155 Sacramento, CA 95814

Dear Rick:

I want to bring to your attention a copy of some slides I used in connection with a presentation that I made to the State Stormwater Task Force on our Orange County, California water quality/aquatic life toxicity work. The aspect of this which may be of interest to CALFED is the discussion provided on the issues that need to be considered in evaluating the water quality significance of aquatic life toxicity due to organophosphate pesticides as well as other constituents

I have also enclosed a set of slides for a presentation I made at the national Society for Environmental Toxicology and Chemistry meeting that was held in San Francisco earlier this week. This presentation was concerned with the problems with current water quality monitoring in identifying pollution and pollutants. It also contains information on the Evaluation Monitoring approach, which focuses monitoring resources on determining the constituents in stormwater runoff that impact the water quality/beneficial uses for the receiving waters for the runoff. This discussion has considerable relevance to CALFED's development of its water quality monitoring programs associated with water quality problem definition and the remediation approaches that will be implemented.

The third set of slides that is enclosed is from a poster session that I presented at the national SETAC meeting concerned with developing regulatory approaches for mercury in Cache Creek and the Delta. I have outlined in these poster items the key components of the program that CALFED should organize and support to begin to develop a technically valid, cost-effective approach for managing the excessive mercury bioaccumulation problem that is occurring between Upper San Francisco Bay and possibly the Delta.

At the national SETAC meeting, I attended a one-day short-course on sediment quality guidelines. This short-course resoundingly confirmed my previous comments on the unreliability of the Long and Morgan, MacDonald and other co-occurrence-based sediment "quality" guidelines as a means of properly designating sediment contaminated areas that need attention. While the speakers were in general pro-sediment quality guideline use, several speakers presented data which demonstrated that greater reliability in predicting sediment toxicity can be achieved by flipping a coin than can be achieved by using Long and Morgan co-occurrence-based values. CALFED is

making a massive error in incorporating Long and Morgan (NOAA) values as the basis for establishing critical concentrations of chemical constituents in aquatic sediments. Even Ed Long was forced to admit that his values are not NOAA values. The issue of the approach that should be used by CALFED to determine when there is need for concern about chemical constituent accumulation in sediments needs to be discussed where ultimately CALFED management reverses its position that Long and Morgan values have credibility for determining excessive concentrations of chemical constituents in sediments that are adversely impacting the beneficial uses of waterbodies.

If you or others within CALFED have questions or wish further information on any aspect of the attached materials, please contact me.

Sincerely yours,

G. Fred Lee, PhD, DEE

Copy to: Lester Snow

Judy Heath Leo Winternitz

GFL:oh Enclosures

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